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Title *A Study on Antireflection and High Reflection Dielectric/Metamaterial Coatings*

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Abstract

The electromagnetic design of multilayered dielectric-metamaterials structure as antireflection and high reflection coatings is presented in this document. Simulation results for the reflection and transmission coefficients of various dielectric and metamaterial structures are presented for their classification as antireflection and high reflection coatings. It is shown that by using an appropriate combination of metamaterial and dielectric slabs, a total reflection or zero-reflection, i.e. controlled transmission/reflection characteristics can be achieved.